

INDIAN INSTITUTE OF TECHNOLOGY KANPUR DEPARTMENT OF MECHANICAL ENGINEERING KANPUR-208016, INDIA

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Enquiry no.: ME/ERL/2013-14/July/01

Enquiry date: July $10^{\rm th},\,2013$

Last Date: July 30th, 2013

<u>Enquiry for On-Line UPS (10 KVA, 1Φ)</u>

On-line UPS from a reputed UPS manufacturer is required for Engine Research Laboratory. Specifications of UPS are given below:

<u>Output</u>

- Topology: Double conversion online, 20 battery bus
- Output Voltage: 230V (Single phase)
- o Efficiency at full load: 90%
- o Output Frequency: 50-60 Hz
- Output Power: 10kVA (1 hr back up at full load)
- o Output Connection: 3 Wire, single phase
- o Parallel Redundancy
- LCD Display of Operational Parameters such as Power Backup Time, Health of UPS, Load, Battery Life.
- o IGBT Technology Based Online UPS
- \circ > 0.97 input power factor /0.8 output power factor
- o Wide Voltage and Frequency Rang compatibly with Genset

<u>Input</u>

- o Input Voltage: 230V
- o Input Frequency: 45-65 Hz
- o Input Connection: 3 wire, single phase
- o Bypass: Internal bypass (Automatic)

Battery

- Make: Bosch, Amaron or Similar Maintenance Free Battery from Reputed Manufacturer
- o Capacity: 64 AH
- Battery Type: Maintenance free sealed lead-acid battery with suspended electrolyte leak proof
- Enclosure: Batteries must be kept in a completely enclosed enclosure, made of at least 18 gauge sheet metal, fabricated with load bearing members.

Communication and Management

- o Interface Port: DB-9 RS-232
- Emergency power off
- o Control Panel: LCD display

Terms & Conditions:

(i) Provide "Authorization certificate" from the manufacturer.

(ii) Prices should include delivery and installation.

(iii) Validity of quotation should be at least for 90 days.

(iv) Warranty should be at least Three Years on UPS and at least two years on batteries.

(v) The offer should be accompanied by at least five purchase orders from Government Departments for Large Capacity UPS's (> 5 KVA) for the same manufacturer.

<u>Payment Terms</u>: 100% Payment will be made only after the supply, full load testing and ensuring compliance with all the specifications given in the tender document.

Kindly send your best offer (Techno-Commercial offer in a single document) so as to reach us on or before July 30th, 2013 to the following address:

Prof. Avinash Kumar Agarwal

Department of Mechanical Engineering, IIT Kanpur, Kanpur – 208016, India

In case of any queries/ clarifications related to this tender, you may contact Mr. Dhananjay Srivastava (+91 9935355990).